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September 18, 2001

Ms. Carol Hanlon
U.S. Department of Energy
Yucca Mountain Site Characterization Office (M/S #025)
P.O. Box 30307
North Las Vegas, Nevada 89036-0307

Dear Ms. Hanlon:

## POSSIBLE SITE RECOMMENDATION FOR YUCCA MOUNTAIN

Ref: 1) 66 Federal Register 43,850 - August 21, 2001

2) Letter from Lake H. Barrett to Neal Slaten dated August 28, 2001 requesting comments on the possible site recommendation

First, I applaud DOE for its progress toward licensing the Yucca Mountain High Level Waste (HLW) disposal facility by moving forward on a possible site recommendation for Yucca Mountain. Any progress towards this societal benefit is welcome indeed, even if long in coming.

Furthermore, I encourage the federal government to continue progress toward meeting its legal obligation to electricity customers to begin moving spent nuclear fuel to a central disposal facility. Through their utility bills, electricity users across the country have paid \$17 billion to date for this purpose. AmerenUE whose customers have paid over \$125 million serves me. By DOE's own estimates, action by the federal government has already slipped at least 12 years past the 1998 contract target date for fuel acceptance.

Specifically, DOE asked that I respond to six suggested topics listed in Reference 2. My comment format addresses those six topics.

1. Please provide your views concerning whether the Yucca Mountain Preliminary Site Suitability Evaluation (PSSE) and other scientific documents produced by the Department provide an adequate basis for finding that the Yucca Mountain site is suitable for development of a repository. If you believe that certain aspects of the PSSE are inadequate, please detail the basis for this belief and indicate how the documentation might be made adequate with respect to these aspects.

The amount of data collected and level of modeling and understanding of the proposed Yucca Mountain repository system as documented in the PSSE and other DOE documents have now evolved sufficiently to support a suitability determination. Forty years of global science and 20 years of specific study at Yucca Mountain support continued progress in this important environmental program. The Secretary of Energy and the President should have high confidence that taking the next step in the repository development process is the scientifically correct action.

In addition to DOE studies, the electric industry has conducted its own independent scientific repository evaluations through the Electric Power Research Institute (EPRI). EPRI's scientific results confirm those published by DOE in the PSSE and its predecessor documents. In fact, EPRI results found DOE's analyses to be very conservative in some areas that included both natural and engineered systems.

2. If the Secretary determines that the scientific analysis indicates that the Yucca Mountain site is likely to meet the applicable radiation protection standards established by the Environmental Protection Agency and Nuclear Regulatory Commission, do you believe that the Secretary should proceed to recommend the site to the President at this time? If not, please explain.

Yes, the Secretary should proceed to recommend the site to President Bush at this time. A site recommendation is good energy and environmental policy. It is the responsible thing to do.

I believe the fact that Yucca Mountain will likely meet conservative EPA and NRC standards is assurance the facility will be protective of public health. In fact, one could easily argue the standards are too stringent given health risks associated with natural background radiation compared with health risks Yucca Mountain will be required to meet. As an example, natural radiation exposure from materials used in construction of the U.S. Capital building would not meet the radiation exposure standards imposed at Yucca Mountain.

3. Are there any reasons that you believe should prevent the President from concluding that the Yucca Mountain site is qualified for the preparation and submission of a construction license application to the Nuclear Regulatory Commission?

No, the scientific evidence clearly shows that the site is qualified for the preparation and submission of a construction license application to the Nuclear Regulatory Commission.

A key point to be made is that approval by President Bush does not constitute approval of site construction or operation. It merely means approval is granted to submit an application to NRC for a construction permit. A rigorous NRC licensing

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process will then independently evaluate the design and operation of a repository at the Yucca Mountain site in three stages – construction, operation, and facility closure.

4. If you believe that the Secretary should not proceed with a recommendation to develop a repository at Yucca Mountain, what mechanism should be utilized to meet the Department's legal obligation to begin accepting spent nuclear fuel and high level radioactive waste?

I believe that the Secretary should proceed with a recommendation to develop a repository at Yucca Mountain. Twenty years of sound science supports a Yucca Mountain site recommendation.

The Secretary must meet the legal obligation to begin accepting spent fuel and high level radioactive waste regardless of what decision is made concerning Yucca Mountain.

The federal government has a long-standing legal obligation to manage spent nuclear fuel as codified in the Nuclear Waste Policy Act in 1982. The courts have consistently upheld the federal obligation to remove spent fuel from reactor sites. This obligation is independent of DOE's repository program. Absence of a repository does not relieve the government of this obligation.

DOE's scientific investigation of Yucca Mountain shows that the site is safe for disposal of spent nuclear fuel and defense radioactive waste. Clearly, there now exists no scientific reason for the federal government to further delay the development of a federal repository. Electricity consumers deserve the disposal services for which they have paid.

5. If you believe that the Secretary should not proceed with a recommendation to develop a repository at Yucca Mountain, what measures should the Nation consider for assuring safe disposal of spent nuclear fuel and high level radioactive waste?

I believe that the Secretary should proceed with a recommendation to develop a repository at Yucca Mountain. Furthermore, I agree with the National Academy of Sciences in its June 16, 2001 report that Geologic Disposal is the only "scientifically and technically credible solution." International scientific consensus supports this concept.

6. Please provide any other comments concerning any relevant aspect of the Yucca Mountain site for use as a repository, or that are otherwise relevant to the consideration of a possible recommendation by the Secretary.

The world's inventory of spent nuclear fuel and high-level radioactive waste is growing because of the continued use of nuclear energy, the dismantling of nuclear weapons, and an emphasis on cleaning up sites where nuclear weapons were developed or built. All these causes, I submit, provide many societal benefits. I also believe the single most important question remaining for the nuclear industry is a long-term solution for isolation of the waste to protect people and the environment from radiation. Simply stated, centralized disposal at Yucca Mountain is more protective than leaving spent fuel and high level waste in 40 states across the country.

A Yucca Mountain site recommendation is an integral part of an environmentally responsible national energy policy. At the present time, 103 operating nuclear power plants supply approximately 20 percent of our nation's electricity benefits without emitting any greenhouse gases. Emerging national energy policies recognize the benefits of nuclear energy utilization and are recommending increased future development.

I thank you for the opportunity to comment on DOE's possible site recommendation for Yucca Mountain.

Sincerely,

Neal G. Slaten